

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
20 September 2001 (20.09.2001)

PCT

(10) International Publication Number  
**WO 01/69795 A1**

(51) International Patent Classification<sup>7</sup>: **H03M 13/29**,  
13/35, H04L 1/00, H03M 13/00

Arnaud [FR/FR]; 80, avenue des Buttes de Coesmes,  
F-35700 Rennes (FR). **MOTTIER, David** [FR/FR]; 80,  
avenue des Buttes de Coesmes, F-35700 Rennes (FR).

(21) International Application Number: **PCT/JP01/01875**

(22) International Filing Date: **9 March 2001 (09.03.2001)**

(74) Agents: **SOGA, Michiteru** et al.; S. Soga & Co., 8th Floor,  
Kokusai Building, 1-1, Marunouchi 3-chome, Chiyoda-ku,  
Tokyo 100-0005 (JP).

(25) Filing Language: **English**

(26) Publication Language: **English**

(81) Designated States (*national*): **CN, JP, KR, US.**

(30) Priority Data:  
**00/03339** **13 March 2000 (13.03.2000)** **FR**

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

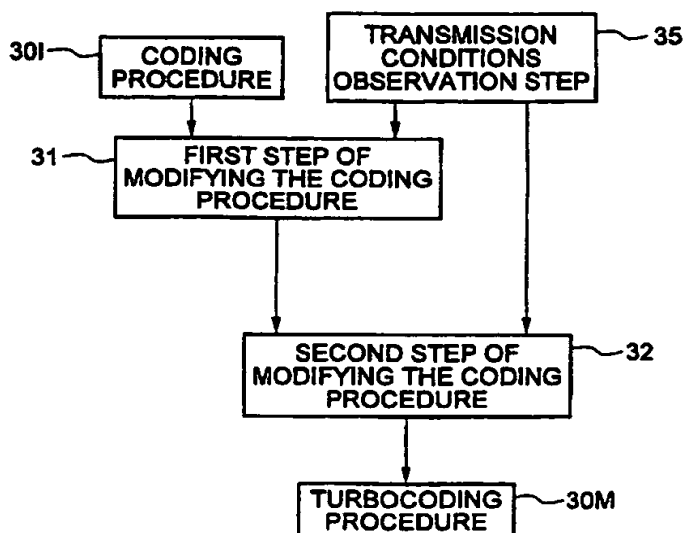
(71) Applicant (*for all designated States except US*): **MIT-  
SUBISHI DENKI KABUSHIKI KAISHA** [JP/JP]; 2-3,  
Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310 (JP).

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **GUEGUEN,**

(54) Title: **ADAPTIVE TURBO-CODING AND DECODING**



(57) Abstract: The coding procedure comprises at least two elementary coding steps associated with respective puncturing steps and concatenated in series, an interleaving step occurring between two successive elementary coding steps. According to the invention, the method also comprises a transmission conditions observation step for determining at least one parameter characteristic of the transmission conditions, a redundancy distribution selection step (33; 43) for selecting, as a function of the said at least one parameter, one distribution of the said elementary coding step redundancies amongst a plurality of distributions of the said elementary coding step redundancies for which the said global efficiency is the same, and a coding procedure adaptation step (33) for adapting the said coding procedure as a function of the said selected redundancy distribution.

WO 01/69795 A1